

CITY OF NEWPORT BEACH

COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION

3300 Newport Boulevard | P.O. Box 1768 | Newport Beach, CA 92658 www.newportbeachca.gov | (949) 644-3275

RESIDENTIAL PLAN REVIEW COMMENTS

Project Description:		
Project Address:		Plan Check No.:
Permit App. Date:		Permit App. Expires:
Use:	Occupancy:	Const. Type:
No. Stories:	Permit Valuation:	Adjusted Valuation:
Architect/Engineer:		Phone:
Applicant/Contact:		Phone:
Plan Check Engineer:		Phone:
Engineer email:		
X 1 st Review: (date)	2 nd Review: Italic comments	3 rd Review: By Appointment

The project plans were reviewed for compliance with the following codes and standards:

2010 CRC; 2010 CBC; 2010 CPC; 2010 CEC; 2010 CMC; 2008 Building Energy Efficiency Standards (BEES); 2010 California Green Building Standards Code (CALGreen); & Chapter 15 of the Newport Beach Municipal Code (NBMC).

The code section references are from the 2010 CBC, unless otherwise stated.

- TO EXPEDITE PROJECT APPROVAL: Please provide a written response indicating how and where each comment was resolved on the plans.
- Resubmit all previously reviewed plans, updated plans and supporting documents with each subsequent review.
- AFTER 2nd PLAN REVIEW: Please call the plan check engineer listed above to schedule a plan review appointment, to expedite project approval.
- For clarification of any plan review comment, please call the plan check engineer listed above.
- Plan review status is available online at <u>www.newportbeachca.gov</u>. Project status is also available using the interactive voice response system at 949-644-3255, or by speaking with a permit technician at 949-644-3288 during business hours.

GENERAL

- 1. Obtain plan review approval from the following:
 - a. Building
 - b. Fire
 - c. Planning
 - d. Public Works
- 2. Include the following on all plan sheets in the title block:
 - a. Site address
 - b. Plan preparer's name, address and telephone number,
- 3. Provide property owner's name, address and telephone number on cover sheet. Also provide project description.
- 4. All permits related to the proposed project shall be issued at the same time, or separate plans and plan review will be required for items not issued with this review. Provide additional permit worksheets for the following:
 - a. Accessory structures, detached patio covers and trellises,
 - b. Masonry or concrete fences over 3.5 ft high,
 - c. Retaining walls over 4 ft high from the bottom of the foundation to the top of the wall.
- 5. Provide fully dimensioned plot plan to scale. Show lot dimensions, street, alley, easements, all projections, and location of all structures.
- 6. A Cal-OSHA permit is required for excavations deeper than 5' and for shoring and underpinning. Write a note on plans.
- 7. Please incorporate attached Residential General Note to drawings.
- 8. Final drawings which will be approved for permit issuance, shall be signed by the respective design professional (electronic signature is acceptable).
- Structural condition of seawall and tiebacks to be investigated by a registered engineer and the necessary repairs shall be done in conjunction with building a new structure. Separate submittal and permit is required for repair.
 Exception: Seawalls around Balboa Island.

LIGHT & VENTILATION

- 10. Exterior glazed openings of habitable rooms for natural light shall be minimum 8% of the room floor area. Artificial lighting may be used in lieu of natural lighting. R303
- 11. Openable ventilation area of habitable rooms must be 4% or more of the room floor area. R303. In lieu of exterior openings for habitable rooms, a mechanical ventilating system meeting the California Mechanical Code requirements may be provided. R303

EXTERIOR WALLS

- 12. Exterior walls of dwellings, guesthouses, garages, carports and/or accessory structures closer than 5 ft. (3 ft. if sprinklered) to the property line shall be 1-hour fire-resistance-rated construction. Table R302.1(1) and (2)
- 13. No openings shall be permitted in the exterior walls, including vents, of Group R-3 & Group U Occupancies where the exterior wall is closer than 3 ft. to the property line. Table R302.1(1) and Table R302.1(2)
- 14. Where the exterior wall of non-sprinklered Group R3/U-Mixed occupancy structure is located between 3 ft and 5 ft. away from the property line. The total area of protected and unprotected openings, including vents, is limited to 25% of the wall area on each floor not including garage wall. R302.1(1) and Table R302.1(2)
- 15. Eaves are not permitted in Group R3/U @ 2 ft. or closer to the property line. Projections in sprinklered structures located > 2 ft. and \leq 3 ft. to the property line and between 2' and 5' from the property line in non-sprinklered structures shall be of at least 1-hour fire-resistance-rated construction or heavy timber. R302.1(1) and Table R302.1(2)

16. Exterior stairways with one open side serving as an element of a required means of egress are not permitted closer than 3 ft. to the property line. Table R302.1(1) and Table R302.1(2). Open side of exterior stair plus other openings on the secure exterior wall shall be limited per Table R302.1(1) and Table R302.1(2).

MEANS OF EGRESS

- 17. In every bedroom and basement greater than 200 sq. ft. or containing habitable space, provide one openable escape opening meeting all of the following: R310
 - a. A net clear opening area of not less than 5.7 sq. ft. (5.0 sq. ft. escape for grade floor window).
 - b. Minimum clear opening height of 24 inches.
 - c. Minimum clear opening width of 20 inches.
 - d. Maximum sill height 44 inches from the floor.
 - e. Provide a well for escape window from basement.
 - f. Area of window well to be 9 sq. ft. minimum with 3' ft. minimum dimension.
 - g. Provide a ladder from window well if deeper than 44"
- 18. Provide a minimum of one exit doorway not less than 3 ft. wide and 6 ft. 6 inches in height, and with a minimum clear width of 32 inches. R311
- 19. Landing lengths at ____ door shall be a minimum of 36 inches in the direction of travel. R311.3
- 20. For habitable levels or basements located more than one story above or more than one story below an egress door, the maximum travel distance from any occupied point to a stairway or ramp that provides egress from such habitable level or basement, shall not exceed 50 feet. R311.4
- 21. Landings or floors at the required egress door shall not be more than 1 ½ inches lower than the top of the threshold. The exterior landing or floor shall not be more than 7 ¾ inches below the top of the threshold provided the door does not swing over the lower landing or floor. R311.3.1
- 22. Provide section and details of interior and exterior stairway showing:
 - a. Maximum rise of 7.75 inches and minimum run (tread) of 10 inches. R311.7.4
 - b. Provide a nosing between 0.75" and 1.25" on stairways with solid risers where tread depth is less than 11". R311.7.4.3 and exception 1
 - c. Minimum width of 36 inches. R311.7.1
 - d. Minimum headroom of 6 ft. 8 inches. R311.7.2
- 23. Winder treads shall have a minimum tread depth of 10 inches at a point 12 inches from the narrow side. R311.7.3
- 24. Spiral Stairways shall comply with the following requirements: R311.7.9.1
 - a. Tread: 7.5", minimum at 12" from narrow edge; Rise: 9.5" maximum; Width: 26" minimum, minimum headroom of 6'-6".
 - b. Provide spiral stairway column connections and footing details
- 25. Handrails shall satisfy the following:
 - a. Provide a minimum of one continuous handrail on stairways with 4 or more risers and at all open sides. R311.7.7
 - b. Handrail height shall be 34 to 38 inches above the nosing of treads. R311.7.7.1
 - c. Handrail with circular cross-sections shall have a diameter of 1.25 to 2 inches. R311.7.7.3 item 1.
 - d. Handrails with other than circular cross-sections shall have a perimeter dimension of 4 to 6.25 inches with a maximum cross-section of 2.25 inches. R311.7.7.3 item 1
 - e. Handrails with a perimeter greater than 6.25 inches shall comply with R311.7.7.3 item 2.
 - f. Handrail shall be continuous without interruption by newel post or other obstruction, except at the landing, volute, or turnout on lowest tread. R311.7.7.2, exception 1 & 2.
 - q. Clear space between handrail and wall shall be 1.5 inches minimum. R311.7.7.2
- 26. Guards (guardrails) shall meet the following:
 - a. Provide guards where the open side is more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side.
 R312 1
 - b. Guard height shall be a minimum of 42 inches. R312.2

- Openings between intermediate balusters shall preclude the passage of a 4 inch diameter sphere. R312.3
- d. The triangular openings formed by the riser, tread and bottom rail shall preclude the passage of a 6 inch diameter sphere. R312.3 exception 1.
- e. Openings between intermediate balusters on the open side of stairs shall preclude the passage of a 4-3/8 inches diameter sphere. 312.3 exception 2.
- 27. Provide a connection detail for guardrail.

CONSTRUCTION

- 28. For duplexes and townhouses provide the following:
 - a. Floors and walls separating dwelling units in the same building shall not be of less than one-hour fire-resistive construction. R302.3
 - b. Provide sound transmission ratings (STC) not less than STC 50.
 - c. Townhouses shall comply with section R302.2
- 29. Where a window sill is located higher than 72" above adjacent grade or finished surface on the opposite side, the lowest part of the opening shall be 24" minimum above the room finish floor surface. R612.2
- 30. Net area of shower enclosure shall be not less than 1,024 sq. inch (7.1 sq.ft.) of floor area, and a minimum of 30 inches diameter circle. CPC 411.7
- 31. Show underfloor ventilation type, size and location. Vents shall meet the following requirements. R408.
 - a. Openings shall be placed so as to provide cross ventilation of the underfloor space.
 - b. The net free ventilating area shall not be less than 1/150 of the crawl-space area.
 - c. Openings shall have corrosion-resistant wire mesh or other approved material with 1/8 inch minimum and ¼ inch maximum opening.
 - d. Cripple wall and vents to be protected where required per CRC 302.1(1) & (2).
- 32. Provide roofing specifications, including roof assembly class, and show roof pitch.
- 33. Roof covering:
 - a. Provide Class A roof covering for new and reconstructed structures. NBMC 15.04.200
 - b. Combustible roof covering (Class B) is permitted in other than high-fire hazard severity zone provided it is part of Class A assembly with 1-Hr. boxed eaves and fire sprinkler system throughout, including attic. NBMC 15.04.220
 - c. Combustible roof covering is not permitted in a high-fire hazard severity zone when it exceeds 50% of the roof area. NBMC 15.04.210
- 34. Provide 2% slope at flat roofs and decks.
- 35. Provide roof drains and overflow. Overflow to be piped separately. R903.4.1
- 36. The following construction components/materials are not included in the California Building Code. Specify the listing/labeling agency and listing number for: _____. Listing agency to be ANSI accredited for type of listing:

GARAGE AND CARPORT

- 37. The following is required for the separation of the private garage from the dwelling unit:
 - a. Garages beneath habitable rooms shall be separated by no less than 5/8 inches type X gypsum board applied to the underside of floor framing. Provide minimum $\frac{1}{2}$ inch gypsum board on the garage side elsewhere. Table R302.6
 - b. Doors shall be 1 3/8" solid core (for non-sprinklered dwellings) and self-closing and self-latching in sprinklered and non-sprinklered dwellings. R302.5.1
 - c. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. R302.5.1

VENEER / FIREPLACE

- 38. Specify and detail the veneer material, thickness, backing, anchorage, footings and support over openings. R703.7
- 39. Exterior stone and masonry veneer up to 5" thick, installed over backing of wood or cold-formed steel according to Table R703.4 and Figure R703.7, shall be limited to first story above grade (R703.7).
- 40. For the fireplace/chimney specify the following:
 - a. Chimney shall extend at least 2 ft. higher than any portion of the building within 10 ft., but shall not be less than 3 ft. above the highest point where the chimney passes through the roof. R1003.9

STRUCTURAL

- 41. Provide material specifications for _____ on the plans.
- 42. Submit structural design/analysis calculations for:
- 43. Provide engineered design in accordance with 2010 CBC. R301.1.3
- 44. For new construction or addition exceeding 1,000 sq.ft. on grade, provide a soils report and reference to soils report on the plans. Specify soils engineer's name, address, report date, etc. List soils allowable design values on foundation plan. NBMC 15.05.150, R401.4.1.1
- 45. Soils engineer to review and approve final foundation and grading plan for complex projects on, or near a slope, or with excavation.
- 46. Provide statement of required special inspections per Section 1704.1.1

FRAMING

- 47. Provide framing support under point load or bearing wall supporting roof framing at ______, and show location of supported post above on floor framing.
- 48. Studs supporting two floors, ceiling, and roof must be 3 x 4 or 2 x 6 at 16 inches on center. CRC Table R602.3.1
- 49. Provide truss design drawings or list with required deferred submittals.

LATERAL

- 50. Wood structural panel shear walls shall comply with CBC Table 2306.3 or SDPWS Table 4.3A. Provide shear wall schedule with following specifications:
 - a. Minimum 3x nominal framing at panel edges and staggered edge nailing where nails are spaced 2 inches on center or closer (footnote e or f.), or when shear design value exceeds 350 plf (footnote i).
 - b. Where panels are applied on both sides of wall and nail spacing is less than 6 inches on center, panel joints shall be offset to fall on different framing members, or framing shall be minimum 3x nominal at adjoining panel edges and edge nailing on each side shall be staggered (footnote h).
 - c. Anchor bolts shall include steel plate washers, a minimum of 0.229" x 3" x 3" in size, between sill plate and nut R602.11.1 (Acceptable alternate SDPWS 4.3.6.4.3)
 - d. Fasteners and connectors to be galvanized for preservative treated wood. CBC 2304.9.5.1
- 51. Determine mapped MCE spectral response acceleration parameters at short periods S_S = and at a one second period S_1 = in accordance with ASCE 7-05 Section 11.4.1.
- 52. Walls braced to resist wind and seismic forces shall not exceed height to width ratios of 3½:1 and 2:1 respectively for wood structural panels; and 1½:1 for gypsum wallboard and Portland cement plaster (stucco). R602.10 / R301.1 and CBC 2305 / AF&PA SDPWS-2008.

Alternates: Braced wall panels per R602.10.3.2.

Portal frames with hold-downs per R602.10.3.3.

53. For shear walls with openings design the force transfer around the openings per R602.10 / R301.1 and CBC 2305 / AF&PA SDPWS-2008

- 54. Provide details for transfer of shear wall holdown forces to foundation for shear walls above first floor.
- 55. Holdowns are required for all shear walls with net uplift forces. Use 0.9 DL for earthquake and 0.67 DL for wind for calculation of forces resisting shear wall overturning.
- 56. Provide grade beam design for continuous footings supporting lateral force resisting elements.
- 57. Design structural elements for support of discontinuous lateral force resisting elements using omega factor 2.5 in accordance with ASCE 7-05 Section 12.3.3.3. Reactions at ends of structural elements are required to be transferred to foundation, or until there are no net reactions. Provide details of all connections.
- 58. Provide design/analysis of horizontal diaphragms, chords and chord splices.
 - a. Provide design of drag/struts and drag/strut connections. Include calculations for required diaphragm nailing at drag/struts (2 rows diaphragm BN will be required if diaphragms on each side of drag/strut are loaded to capacity).
 - b. Identify drag/struts on plans and specify drag/strut nailing.

FOUNDATION

- 59. New construction or reconstruction of more than 75% of the first floor envelope located within an area prone to liquefaction shall mitigate liquefaction by using one of the following options:
 - a. Minimum Construction requirement option 1
 - i. Tie all pad footings with grade beams.
 - ii. Bottom of all footings to be 24 inch below grade
 - iii. Continuous footings to have a minimum of 2 #5 steel bars at top and bottom.
 - iv. Floor slab on grade to be 5 inch thick (minimum) reinforced with #4 bars at 12 inch on center each way located at the center of the slab.
 - v. Dowel footing to slab with #4 bars at 24 inch on center.
 - b. Minimum Construction requirement option 2
 - i. Mix the top five feet of sand with cement at the ratio of two sacks of cement per cubic yard and recompact in place.
 - ii. Tie all pad footings with grade beams.
 - c. 12 inch thick structural mat foundation.
 - d. Post-tension slab and foundation.
 - e. Caissons or pile foundation. Driven piles should not be used since vibrations from pile driving will result in consolidation and damages to adjacent structures.
 - f. Replace soils to a depth of five feet with imported soils approved by a soils engineer.
 - g. Foundation design per soils engineer recommendation, which is equal to or exceeds mitigation methods listed above.
- 60. Provide minimum of 1-#4 reinforcing bar at top and bottom of continuous footings.
- 61. Wood framing members, including wood sheathing, that rest on exterior foundation walls and are less than 8 inches from exposed earth shall be of naturally durable or preservative-treated wood. R317.1(2)
- 62. Call out foundation bolt size and spacing on foundation plan. The foundation bolts shall be ½ inch diameter for SDC D and 5/8 inch diameter for SDC E or F with 0.229 inch x 3 inch x 3 inch plate washers, embedded at least 7 inches into the concrete or masonry foundation, spaced not more than 6 ft. apart. R602.11.1
- 63. Show minimum 18 inch under floor clearance from grade to bottom of floor joists and minimum 12 inch clearance to bottom of girders. R317.1

MECHANICAL, PLUMBING & ELECTRICAL

- 64. Provide heating facilities per CRC R303.8.
- 65. Show location of FAU.
- 66. Show location of electrical panel on plans. Electrical panels are not permitted in closets, bathrooms, and pantries.
- 67. Keep three feet clear from face of electrical panel to any wall surface or obstruction.

ENERGY EFFICIENCY (2008 BUILDING ENERGY EFFICIENCY STANDARDS (BEES))

NEW CONSTRUCTION (BEES 151)

- 68. Specify method of compliance and provide energy calculations. List mandatory features (MF-1R) and provide Certificate of Compliance (CF-1R) forms on plans. CF-1R form is to be signed by designer or owner, and documentation author.
- 69. For Performance approach, use one of the following certified programs:
 - Micropass 8.1
 - Energy Pro 5.1
 - CalRes 2008 v.1.1
- 70. Provide an itemized list of all fenestrations in energy documentation. Identify exterior doors and windows with method similar to window schedules.
- 71. Specify U-factors and Solar Heat Gain Coefficient (SHGC) values for all fenestrations on window and door schedules. Add note to schedules, "Fenestrations must have temporary and permanent labels."
- 72. For new construction and additions greater than 1000 sf provide a whole-building mechanical ventilation system. Include ventilation system sizing calculations on the plans. Whole-building ventilation shall be provided by exhaust air, supply air or combined exhaust and supply air system. Natural ventilation through doors and windows is not an acceptable in lieu of providing whole-building ventilation. BEES 150(o), Exc. 5 to 152(a) & ASHRAE Std. 62.2
 - a. Min. required rate of ventilation (cfm) = 1 cfm per 100 sf of floor area + 7.5 cfm per occupant
 - b. Number of occupants = number of bedrooms + 1
- 73. In kitchen specify the local exhaust system vented to outdoors shall have a minimum exhaust rate of 100 cfm. BEES 150(o), Exc. 5 to 152(a) & ASHRAE Std. 62.2

CAL GREEN CONSTRUCTION REQUIREMENTS

74. Incorporate the attached applicable CAL Green construction requirements into the General Notes sheet of the drawings. Verify that the design complies with these standards.

SOUND TRANSMISSION CONTROL

- 75. A Sound Transmission Class (STC) rating of not less than 50 based on laboratory testing (45 if field tested) is required. CBC 1207.7. Provide construction details of the sound rated partition between dwelling units. CBC 1207
- 76. Provide construction details of the floor-ceiling assembly over. An STC rating and Impact Insulation Class (IIC) rating of not less than STC 50 based on laboratory testing (45 if field tested) is required. CBC 1207.8
- 77. Identify all sound rated partitions, floors and decks on the floor plans.
- 78. Wall-mounted lavatories and toilets are not permitted on sound-rated partitions.
- 79. Add the following sound insulation notes on the drawings:
 - a. Approved acoustical sealant shall be provided along the joint between the floor and the separation wall.
 - b. All penetrations into sound-rated partitions of floor-ceiling assemblies shall be sealed with approved permanent resilient sealant.

- c. All rigid conduit, ducts, plumbing pipes and appliance vents located in sound assemblies shall be isolated from the building construction by means of resilient sleeves, mounts or minimum ¼" thick approved resilient material.

 Exception: gas piping need not be isolated.
- d. Metal ventilating and conditioned air ducts located in sound assemblies shall be lined.
- e. Mineral fiber insulation shall be installed in joist spaces to a point 12" beyond the pipe or duct, whenever a plumbing pipe or duct penetrates a floor-ceiling assembly or where such unit passes through the plane of the floor-ceiling assembly within a wall

FIRE SPRINKLER REGULATIONS

80. Sprinklers:

- a New construction, addition and reconstruction, which exceed 2,000 sf. and exceed 50% of the area of the existing structure, require installation of a fire sprinkler system throughout the structure.
- b Sprinkler drawings and hydraulic calculations to be submitted to plan check and approved prior to issuing a building permit or provide a note on the drawing stating: "Obtain fire sprinkler permit prior to calling for roof sheathing inspection."

FLOOD HAZARD ZONE

- 81. Building site is located in a special flood hazard zone. Top of slab or first floor over crawl space to be at or above elevation: 9.0 MSL (North American Vertical Datum (NAVD) 88). National Geodedic Vertical Datum (NGVD) = NAVD 2.4'. NBMC 15.50.200(c)
- 82. Existing structure: The cost of construction based on City-adopted construction valuation table exceeds 50% of the depreciated value of the existing structure. The entire structure (existing and new) shall be elevated so top of slab elevation is at or higher than 9.0 MSL (NAVD88). NBMC 15.50.200
- 83. Parking garage: Building access or storage may be located below the base flood elevation (BFE) provided the floor elevation is above adjacent grade. Provide two openings, bottom of openings to be within 1 foot from grade and below the top of concrete curb supporting the sill plate. Provide one inch of opening per foot of floor area. NBMC 15.50.200(d)
- 84. Where top of garage floor slab is lower than the base flood elevation (BFE), garage walls are to be supported over concrete curb with top of curb \geq 9.0 NAVD.
- 85. A licensed surveyor shall complete FEMA elevation certificate and submit it to Building Department Inspector during final inspection. (Show note on plans.)
- 86. All mechanical and electrical equipment, including ducts to be at or above base flood elevation of 9.0 msl. (NAVD 88).
- 87. Please scan or copy attached General Residential Notes sheet to drawings

ADDITIONAL CORRECTIONS:

88.